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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,769	12/11/2000	Ik-Soo Lee	6192.0171.AA	2720

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McGuireWoods LLP
1750 Tysons Blvd
Suite 1800
McLean, VA 22102

EXAMINER

SCHECHTER, ANDREW M

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,769

Applicant(s)

LEE ET AL.

Examiner

Andrew Schechter

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,16,17,21 and 23 is/are rejected.
- 7) ☒ Claim(s) 3-15,18-20 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Response to Arguments

2. Applicant's arguments filed 10 April 2003 have been fully considered but they are not persuasive.

The amendments to the claims have overcome the previous rejections. The prior art *Lewis* does not disclose a groove shape portion for supporting the back light assembly, so it does not read on claims 1 and 21. The prior art *Okajima* discloses a curved portion around the backlight, but the curved portion does not support the back light assembly, so it does not read on claims 1 and 21. The previous rejections are therefore withdrawn.

The examiner notes, regarding the rejections below in view of *Kurihara*, that the groove shape portion of *Kurihara* is different than the groove shape portion of the present application, though they both read on the present claim language.

Claim Objections

3. Claims 7, 12, 22, and 23 are objected to because of the following informalities:

The phrase "the side wall" in claims 7 and 12 is used without antecedent (the antecedent was removed by the amendment). The phrase "second receptacle" in claim 22 should be --second receptacle module--. Appropriate correction is required.

Claims 22 and 23 depend on claim 22. This is nonsensical for claim 22, and also for claim 23, since having grooves (for supporting a backlight assembly) for both the main portion and the extension portion is not disclosed by the specification and would be strange since the disclosed backlights are only on one side of the display. For examining purposes below, the examiner assumes that both are meant to depend on claim 21.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not describe having the groove shape portion formed in one of the main portions of the second receptacle module.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 16, 17, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kurihara et al.*, U.S. Patent No. 5,946,061 in view of *Okajima et al.*, U.S. Patent No. 5,334,993.

Kurihara discloses [see Fig. 2] a liquid crystal display device comprising a liquid crystal panel [11], a receiver [13 and 14] for providing a receiving space where the liquid crystal panel is to be located, the receiver including a first receptacle module [14] and a second receptacle module [13] arranged together for enclosing the receiving space, wherein the second receptacle module includes a first mold frame [13, on left] and a second mold frame [13, on right], including a groove shape portion [13c] for supporting the liquid crystal panel, and a bottom plate [13a] arranged on the second receptacle module, the bottom plate extends into the receiving space for the second receptacle module for supporting a display unit [11].

Kurihara is silent on the details of the liquid crystal panel, in particular as to whether there is a back light assembly with light source and luminance improving device inside the liquid crystal panel [11]. *Okajima* discloses [see Figs. 1-5] a liquid crystal panel [analogous to the one in *Kurihara*, and intended for the same use, note book type personal computers] with a backlight assembly having a light source [111] and a

Art Unit: 2871

luminance improving device [13] that guides the light. It would have been obvious to one of ordinary skill in the art to use a liquid crystal panel like the one in *Okajima* in the device of *Kurihara*, motivated by *Okajima*'s teaching that it has a "uniform display surface and improved display quality". [Such backlit LCDs are conventional and are the subject of class 349, subclass 65.] In the device of *Kurihara* in view of *Okajima*, the back light assembly would then be located in the receiving space, and the groove shape portion would be for supporting the back light assembly. Claim 1 is therefore unpatentable.

The second receptacle module [13] includes a main portion [parallel the short side of the display] and an extension portion [at the ends on the right] substantially perpendicular to the main portion; and the groove shape portion is formed along a surface of the second receptacle module. Claim 21 is therefore unpatentable as well. The groove shape portion is formed in at least one of the main portions of the second receptacle module, so claim 23 is also unpatentable.

Regarding claim 2, the second receptacle module is arranged near both ends of the first receptacle module and substantially closes the receiving space. *Kurihara* does not disclose the materials that are used, though it appears from the drawing that [13] is made of a metal [advantage: rigidity for "mechanical fixing strength" col. 1, line 54]. The examiner takes official notice that the main body cover [14] can be made of either plastic [advantage: lightweight] or metal [advantage: electromagnetic shielding]. One of ordinary skill in the art would therefore find it obvious to make them out of either the

Art Unit: 2871

same, or different, materials, motivated by the various advantages noted above. Claims 2 and 17 are therefore unpatentable.

The first and second receptacles are engaged with each other, so claim 16 is also unpatentable.

Allowable Subject Matter

8. Claims 3-15, 18-20, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

Claims 3 and 18 recite the additional limitation that the second material (for the second receptacle module) is plastic; this is not disclosed or suggested by the prior art (in particular *Kurihara*). Claims 3 and 18, and their dependent claims 4-8, would therefore be allowable if rewritten appropriately.

Claim 9 recites the additional limitation that the first receptacle module includes a catching recess; this is not disclosed or suggested by the prior art (in particular *Kurihara*). Claim 9, and its dependent claims 10-12, would therefore be allowable if rewritten appropriately.

Claim 13 recites the additional limitation that the first receptacle module comprises an engaging boss; this is not disclosed or suggested by the prior art (in

particular *Kurihara*). Claim 13, and its dependent claims 14 and 15, would therefore be allowable if rewritten appropriately.

Claim 19 recites the additional limitation that the first and second receptacle modules are connected by using a stepped portion; this is not disclosed or suggested by the prior art (in particular *Kurihara*). Claim 19, and its dependent claim 20, would therefore be allowable if rewritten appropriately.

Claim 22 recites the additional limitation that the groove shape portion is in one of the extension portions; this is not disclosed or suggested by the prior art (in particular *Kurihara*). Claim 22 would therefore be allowable if rewritten appropriately.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,815,227 to *Lee* discloses an LCD back light assembly supported in a receiver with what might be described as a groove [Fig. 3], but not first and second receptacle modules as recited by claims 1 and 21.

U.S. Patent No. 5,654,779 to *Nakayama et al.* discloses a backlight assembly with lamp holders [10a and 10b] which have a curved shape. (This is typical, since having a parabolic curved reflector behind the lamp improves the collimation of the light entering the light guide [4].) The examiner interprets the lamp holders as being part of the back light assembly (analogous to the lamp cover 223 in the present specification), and therefore interprets the curved shape of the lamp holder as not being a "groove

Art Unit: 2871

shape portion for supporting the back light assembly" as recited in claim 1 (and similarly in claim 21). The back of the lamp holders is flat, so the receiver supporting the back light assembly has no groove.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (703) 306-5801. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (703) 305-3492. The fax phone numbers

Application/Control Number: 09/732,769

Page 9


Art Unit: 2871

for the organization where this application or proceeding is assigned are (703) 746-4711 for regular communications and (703) 746-4711 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Andrew Schechter
June 26, 2003



ROBERT H. KIM
SUPERVISOR / PATENT EXAMINER
TECHNOLOGY CENTER 2000